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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,080	08/04/2003	Thomas M. Tirpak	33692.02.2745	5254
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VEDDER PRICE P.C. 222 N. LASALLE STREET CHICAGO, IL 60601			EXAMINER MORRISON, JAY A	
			ART UNIT 2168	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,080

Applicant(s)

TIRPAK ET AL.

Examiner

JAY A. MORRISON

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5-12, 14-22, 25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5-12, 14-22, 25 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. Claims 1, 5-12, 14-22, 25 and 27 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 5 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Keith (Patent Number 6,629,097).

As per claim 1, Keith teaches

A data management system comprising: (see abstract and background)

a processing device (computer-implemented system, column 56, lines 32-36);

memory containing executable instructions that cause the processing device to perform as a knowledge container creator module operative to create at least a first

data descriptor item and at least a second data descriptor item based upon a raw data item (entities and concepts, column 25, line 53 through column 26, line 19) capable of containing data representing raw data that is in one of a plurality of different formats (myriad of data sources, column 18, lines 8-20), and to link the raw data item to at the least a first data descriptor item, and to link the raw data item to the at least a second data descriptor item (entities and concepts, column 25, line 53 through column 26, line 19);

and wherein the first data descriptor item is in the form of a context descriptor (entity descriptions, column 44, lines 7-33),

and wherein the second data descriptor item is in the form of at least a data access instructions descriptor (associative terms, column 25, lines 53-60; note that data access instructions descriptor is non-functional descriptive material, and this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994)).

As per claim 25, Keith teaches

A computer readable medium containing programming instructions for processing data, the computer readable medium including programming instructions for: (see abstract and background)

linking a raw data item, capable of containing data representing raw data stored that is in one of a plurality of different formats" (myriad of data sources, column 18, lines

8-20), to at least a first data descriptor item wherein the first data descriptor item is in the form of a context descriptor, containing descriptive information about the raw data item, linking the raw data item to at least a second data descriptor item, wherein the second data descriptor item is in the form of at least a data access instructions descriptor, providing instructions on how to access the raw data in the raw data item (entities and concepts, column 25, line 53 through column 26, line 19; note that data access instructions descriptor is non-functional descriptive material, and this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994));

locating the raw data item by searching at least one of: the first and second data descriptor items (column 44 lines 34-60);

generating knowledge transformation information by extrapolating data from the raw data item (matrices, column 25, line 53 through column 26, line 20);

and creating the first and second data descriptor items based upon the raw data item (entities and concepts, column 25, line 53 through column 26, line 19).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 6-12, 14-22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keith (Patent Number 6,629,097) in view of Roth (Publication Number 2003/0055835).

As per claim 5, Keith teaches

A data management system comprising: (see abstract and background)

a processing device (computer-implemented system, column 56, lines 32-36);
and memory containing executable instructions that cause the processing device to perform as a knowledge container creator module operative to link (identify and store, column 25, lines 53-60) a raw data item that is in one of a plurality of different formats (myriad of data sources, column 18, lines 8-20), to at least a first data descriptor item, in XML format, wherein the first data descriptor item is in the form of a context descriptor containing descriptive information about the raw data item (entity description, column 25, lines 48-52), and wherein the knowledge container creator module is operative to link the raw data item to at least a second data descriptor item, in XML format, wherein the second data descriptor item is in the form of at least a data access instructions descriptor, providing instructions on how to access the raw data in the raw data item (associative terms, column 25, line 53 through column 26, line 19; note that data access instructions descriptor is non-functional descriptive material, and this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994)).

a knowledge container searcher module operative to retrieve the raw data item by searching at least one of: the first and second data descriptor items (column 44, lines 34-60);

Keith does not explicitly indicate "a base knowledge container update module that is operative to format the raw data item into a specific XML knowledge container format".

However, Roth discloses “a base knowledge container update module that is operative to format the raw data item into a specific XML knowledge container format” (raw data converted to xml, paragraph [0058], lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Keith and Roth because using the steps of “a base knowledge container update module that is operative to format the raw data item into a specific XML knowledge container format” would have given those skilled in the art the tools to improve the invention by allowing raw data to be put into a more useful and standard data definition standard which is widely accepted. This gives the user the advantage of portability of data between platforms and applications.

As per claim 6, Keith teaches
the knowledge container creator module is operative to generate the first data descriptor item based upon the raw data item (entities, column 25, lines 53-60).

As per claim 7, Keith teaches
a base knowledge container update module that is operative to generate the second data descriptor item based upon the raw data item (concepts, column 25, lines 53-60).

As per claim 8, Keith teaches

Keith does not explicitly indicate “a base knowledge container update module that is operative to format the first and second data descriptor items in XML knowledge container format”.

However, Roth discloses “a base knowledge container update module that is operative to format the first and second data descriptor items in XML knowledge container format” (paragraph [0058], lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Keith and Roth because using the steps of “a base knowledge container update module that is operative to format the first and second data descriptor items in XML knowledge container format” would have given those skilled in the art the tools to improve the invention by allowing raw data to be put into a more useful and standard data definition standard which is widely accepted. This gives the user the advantage of portability of data between platforms and applications.

As per claim 9, Keith teaches

a knowledge container administrator module operative to modify a template descriptor item, for creating the first data descriptor item and for searching the first and second data descriptor items, wherein the template descriptor item includes at least one of: template knowledge containers, for providing the inputs for entering the context descriptor, search template knowledge containers, for providing the inputs for searching the data descriptor items, and dictionary knowledge containers, for identifying keywords (column 30, lines 58-65).

As per claim 10, Keith teaches
modifying template descriptor item includes at least one of: adding fields,
removing fields, adding keywords and removing keywords (column 44, lines 34-45).

As per claim 11, Keith teaches
a knowledge container administrator module operative to create knowledge
transformation information by extrapolating data from the raw data item and operative to
link the raw data item to the knowledge transformation information (column 20, lines 27-
68).

As per claim 12, Keith teaches
the knowledge container administrator module is operative to create a knowledge
model using knowledge discovery techniques on the raw data item in the form of at
least one of: decision trees, rule sets, neural networks and expression trees (analyze
relational structure, column 45, lines 12-21).

As per claim 14, Keith teaches
the base knowledge container update module generates a keyword descriptor by
processing the raw data item (associative terms, column 25, lines 53-60).

As per claim 15, Keith teaches

a knowledge container database operative to store the raw data item, the first data descriptor item, and the second data descriptor item (column 17, lines 20-50; column 18, lines 8-20).

As per claim 16, Keith teaches
the base knowledge container comprises: a knowledge source depository containing the raw data item (column 18, lines 8-20);
and a metaknowledge depository containing the at least two data descriptor items associated with the raw data item (column 44, lines 40-50).

As per claim 17, Keith teaches
the base knowledge container further comprises a knowledge representation depository containing the knowledge transformation information generated from the raw data item (matrices, column 25, line 53 through column 26, line 20).

As per claim 18, Keith teaches
the knowledge transformation information is in the form of at least one of: knowledge model and summary report (matrices, column 25, line 53 through column 26, line 20).

As per claim 19, Keith teaches

the knowledge model is in the form of at least one of: decision trees, rule sets, neural networks and expression trees (analyze relational structure, column 45, lines 12-21).

As per claim 20, Keith teaches

the first and second data descriptor items are in the form of at least one of the following: decision-support data descriptor, keyword descriptor, context descriptor and data access instructions descriptor (entities and concepts, column 25, line 53 through column 26, line 19).

As per claim 21, Keith teaches

the raw data item, the first descriptor item and the second descriptor item are stored (column 25, lines 40-47)

Keith does not explicitly indicate "in a XLM data blocks".

However, Roth discloses "in a XLM data blocks" (raw data converted to xml, paragraph [0058], lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Keith and Roth because using the steps of "in a XLM data blocks" would have given those skilled in the art the tools to improve the invention by allowing raw data to be put into a more useful and standard data definition standard which is widely accepted. This gives the user the advantage of portability of data between platforms and applications.

As per claim 22, Keith teaches
are defined by a data block definition with a form including at least one of: a table
and a matrix (column 25, lines 40-47)

Keith does not explicitly indicate "the XML data blocks".

However, Roth discloses "the XML data blocks" (paragraph [0058], lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine Keith and Roth because using the steps of "the XML
data blocks" would have given those skilled in the art the tools to improve the invention
by allowing raw data to be put into a more useful and standard data definition standard
which is widely accepted. This gives the user the advantage of portability of data
between platforms and applications.

As per claim 27, Keith teaches
A data management system comprising: (see abstract and background)
a processing device (computer-implemented system, column 56, lines 32-36);
and memory containing executable instructions that cause the processing device
to perform as a knowledge container creator module operative to create at least a first
data descriptor item and at least a second data descriptor item based upon the raw data
item (entities and concepts, column 25, line 53 through column 26, line 19), capable of
containing data representing raw data that is in one of a plurality of different formats
(myriad of data sources, column 18, lines 8-20), and to link a raw data item to at the

least a first data descriptor item, and the knowledge container creator module operative to link the raw data item to the at least a second data descriptor item (column 25, line 53 through column 26, line 20), wherein the second data descriptor item is in the form of at least: a decision-support data descriptor, containing a decision-support information generated from the raw data; a keyword descriptor, identifying keywords contained in the raw data item, and a data access instructions descriptor, providing instructions on how to access the raw data in the raw data item (column 44, lines 7-33; note that data access instructions descriptor is non-functional descriptive material, and this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994));

and a knowledge container searcher module operative to retrieve the raw data item by searching at least one of: the first and second data descriptor items (column 44 lines 34-60);

a knowledge container administrator module operative to modify template descriptor item for creating the first data descriptor item and for searching the first and second data descriptor items, wherein the template descriptor item includes at least one of: template knowledge containers, for providing the inputs for entering the context descriptor, search template knowledge containers, for providing the inputs for searching the data descriptor items, and dictionary knowledge containers, for identifying keywords (column 55, line 34 through column 45 line 11), and the knowledge container administrator module operative to create knowledge transformation information by

extrapolating data from the raw data item and operative to link the raw data item to the knowledge transformation information (matrices, column 25, line 53 through column 26, line 20);

and to generate a keyword descriptor by processing the raw data item (column 25, lines 53-60);

a knowledge container database operative to store the raw data item, the first descriptor item and the second descriptor item and the knowledge container database further having: a knowledge source depository containing the raw data item (column 17, lines 20-50; column 18, lines 8-20);

a metaknowledge depository containing the data descriptor item associated with the raw data item" (column 44, lines 40-55);

and a knowledge representation depository containing the knowledge transformation information generated from the raw data item (matrices, column 25, line 53 through column 26, line 20).

Keith does not explicitly indicate "and a base knowledge container update module operative to format the raw data item into an XML knowledge container format".

However, Roth discloses "and a base knowledge container update module operative to format the raw data item into an XML knowledge container format" (raw data converted to xml, paragraph [0058], lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Keith and Roth because using the steps of "and a base knowledge container update module operative to format the raw data item into an XML

knowledge container format" would have given those skilled in the art the tools to improve the invention by allowing raw data to be put into a more useful and standard data definition standard which is widely accepted. This gives the user the advantage of portability of data between platforms and applications.

Response to Arguments

6. Applicant's arguments filed 8/19/2008 have been fully considered but they are not persuasive.

Applicant argues that Keith does not disclose that the knowledge container itself contains XML data blocks. It is respectfully submitted that the newly added reference teaches these limitations as shown above, and therefore Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the amendments to the claims note that the second data descriptor is in the form of at least a data access instruction descriptor that provides instructions on how to access the raw data in the raw data item and references paragraph 52 in the specification. Paragraph 52 of the specification described the instructions as "either user readable or computer readable", where "[t]he user readable text can be, for example, a textual description instructing how to access or otherwise

manipulate or use the information stored in the raw data item", and it is respectfully submitted that this describes non-functional descriptive material and does not distinguish the claimed invention from the prior art in terms of patentability.

Conclusion

7. The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit 2168

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